UNITED STATES PATENT AND TRADEMARK OFFICE

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/080,317	02/21/2002	Kuniaki Kurihara	09792909-5351	8182

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EXAMINER
ADHAMI, MOHAMMAD SAJID

ART UNIT	PAPER NUMBER
2616	

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Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

	Application No.	Applicant(s)
Office Action Summary	10/080,317	KURIHARA, KUNIAKI
	Examiner	Art Unit	
	Mohammad S. Adhami	2616	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

☞ A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE *3* MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *30 October 2007*.

2a)☐ This action is **FINAL.**   2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1,2,5-7,9-11 and 13-16* is/are pending in the application.

    4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1,2,5-7,9-11,13-16* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

    Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

    Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

    a)☐ All   b)☐ Some *   c)☐ None of:

      1.☐ Certified copies of the priority documents have been received.

      2.☐ Certified copies of the priority documents have been received in Application No. _____.

      3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

    * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1)☒ Notice of References Cited (PTO-892)

2)☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)

3)☐ Information Disclosure Statement(s) (PTO/SB/08)
    Paper No(s)/Mail Date _____.

4)☐ Interview Summary (PTO-413)
    Paper No(s)/Mail Date. _____ .

5)☐ Notice of Informal Patent Application

6)☐ Other: _____.

DETAILED ACTION

- Applicant's RCE filed 10/30/2007 is acknowledged.

- Claims 1,5-7,9-11, and 13-15 have been amended.

- Claims 3,4, 8, and 12 have been cancelled.

- Claim 16 has been added.

- Claims 1,2,5-7,9-11, and 13-16 are pending.

Continued Examination Under 37 CFR 1.114

1.   A request for continued examination under 37 CFR 1.114, including the fee set

forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this

application is eligible for continued examination under 37 CFR 1.114, and the fee set

forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action

has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on

10/30/2007 has been entered.

Claim Rejections - 35 USC § 112

1.   The following is a quotation of the second paragraph of 35 U.S.C. 112:

> The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

2.   Claims 1,2,5-7,9-11, and 13-16 are rejected under 35 U.S.C. 112, second

paragraph, as being indefinite for failing to particularly point out and distinctly claim the

subject matter which applicant regards as the invention.

Re claims 1,6, and 7:

The limitation *clocking the time when the first information is transmitted* is confusing because first information is claimed as being transmitted with first information units, so is the time the first information unit is transmitted clocked?

In the context of the claim, it is unclear what *information* refers to. Is the information packets, codes about transmission, video and audio content, etc.? The limitations referring to information are vague and indefinite and therefore are confusing as written.

Re claims 9-11:

In claim 9, it is unclear what *when said indication is received* refers to.

It is unclear what *the indication about the reception of said information fragments* is.

The limitation *receiving an information packet via information fragments which are created by dividing the information packet* is vague and indefinite. The limitation appears cyclic, the received information packet is sent via information fragments, which are made from the information packets, so are the information fragments made from themselves?

Re claims 2,5,13-15, and 16:

Claim 2, 5, 13-15, and 16 are rejected because they depend from rejected claims.

Claim Rejections - 35 USC § 103

3.   The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all

obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set
> forth in section 102 of this title, if the differences between the subject matter sought to be patented and
> the prior art are such that the subject matter as a whole would have been obvious at the time the
> invention was made to a person having ordinary skill in the art to which said subject matter pertains.
> Patentability shall not be negatived by the manner in which the invention was made.

4.   Claims 1,2,6,7, and 13-16 (as best understood) are rejected under 35 U.S.C.

103(a) as being unpatentable over Jalali in view of Tseung (US 5,109,384) and

Hamilton (US 6,392,993).

Re claims 1,6, and 7:

      Jalali discloses *dividing information into a set of information units* (Fig.2

and Para.42 Forward link signals are divided into time slots and each slot is

divided into two half-slots - where first and second information are respectively

divided into first and second sets of information units).

      Jalali discloses *transmitting first information to a transmission party* (Fig.1

ref.106).

      Jalali further discloses *receiving information about the reception of the first*

information from the transmission party (Fig.1 ref.104 and Fig.3 ref.312).

      Jalali discloses *clocking the time from when each unit of the first set of*

information units is transmitted (Para.[0052] "the maximum number time for

which a packet can remain in the first-time queue after the packet has been

transmitted" where being able to know the time a packet has remained in a

queue after being transmitted entails clocking the time for when the packet was first transmitted).

Jalali further discloses *determining whether or not the clocked time exceeds a reference value* (Fig.3 ref.316 and Para.[0052] "the parameters comprise, e.g., the maximum number of times a packet can be retransmitted and the maximum number time for which a packet can remain in the first-time queue after the packet has been transmitted").

Jalali further discloses *transmitting a second set of information units when it is determined that the clocked time exceeds a reference value* (Fig.3 ref.318 where the first information is no longer transmitted, so the transmission of second information will begin).

Jalali does not explicitly disclose *setting a flag indicating that the clocked time exceeds the reference value*.

Tseung discloses *setting a flag indicating that the clocked time exceeds the reference value* (Col.22 lines 62 and 63 "The timer would expire (the ACK timer expired on network B flag 866 would be set) and " where the timer expires after a "reference value" is exceeded).

Jalali and Tseung are analogous because they all pertain to data transmission.

It would have been obvious to one of ordinary skill in the art at the time of the invention to modify Jalali to include setting a flag indicating the clocked time has exceeded a reference value as taught by Tseung in order to

make appropriate data processing decisions regarding the communication of

multi-packet messages.

Jalali does not explicitly disclose *writing.the flag into the second*

information that is transmitted.

Hamilton discloses *writing the flag into the second information that is*

transmitted (Abstract The positive reliability mode sets a flag in the packets

transmitted where setting the flag in the packets involves "writing" the flag and

Table 3 in Col.11 lines 43-60).

Jalali and Hamilton are analogous because they both pertain to data

transmission.

It would have been obvious to one of ordinary skill in the art at the time of

the invention to modify Jalali to include writing a flag into the second information

that is transmitted as taught by Hamilton in order to notify the receiver of the

condition represented by the flag.

Re claim 2:

Jalali further discloses *using packets for transmission* (Abstract A

transmitting terminal transmits signals in a form of packets to a receiving

terminal).

Re claims 13-15:

Jalali further discloses *retransmitting a unit of the first information units*

when it is determined that the clocked time does not exceed a reference value

(Fig.3 ref.320).

Jalali further discloses retransmitting the unit of the first information units

when the transmission party indicates the unit of the first set of information has

not been received (Fig.3 ref.312 where a NAK indicates the first information has

not been received).

Re claim 16:

Jalali discloses *the information units including clock information for*

creating a time to reproduce the information unit (Fig.4 ref. 420, where the

sequence number is "clock information" and the information unit should be

reproduce in sequence).

5.   Claim 5 (as best understood) is rejected under 35 U.S.C. 103(a) as being

unpatentable over Jalali in view of Tseung and Hamilton as applied to claim 2 above,

and further in view of Kamihara (US 6,854,020).

Re claim 5:

As discussed above, Jalali meets all the limitations of the parent claims.

Jalali does not explicitly disclose *clearing the flag when all of the second*

set of information units forming the second information are transmitted.

Kamihara discloses *clearing the flag when all of the second set of*

information units forming the second information are transmitted (Col3 lines 55

and 56 "clearing the transmission-in-progress flag on condition that packet

transmission has ended" where after the transmission is complete, a flag is

cleared).

Jalali and Kamihara are analogous because they all pertain to data

transmission.

It would have been obvious to one of ordinary skill in the art at the time of

the invention to modify Jalali to include clearing the flag after all the second

packets are transmitted as taught by Kamihara in order to make appropriate data

processing decisions regarding the communication of multi-packet messages.

6.   Claims 9-11 (as best understood) are rejected under 35 U.S.C. 103(a) as being

unpatentable over Hamilton in view of Knobel (US 6,765,871).

Re claims 9-11:

Hamilton discloses *dividing information packets into information fragments*

(Fig.7 reference 124 where the "information packets" are messages and the

"information packets" are the packets that make up the messages).

Hamilton further discloses *receiving information fragments via a network*

and an indication about the reception of the information fragment (Figure 8

reference 148 and Table 3).

Hamilton further discloses *storing each of the information fragments*

received (Figure 8 reference 150 and Col.19 lines 32-37 "Since messages may

have to be buffered until all packets are received, embodiments within the scope

of this invention may comprise means for storing received packets until an entire

message is received...such means is illustrated by message receive list 150").

Hamilton further discloses *assembling the stored information fragments to*

reproduce the information packet (Figure 8 reference 148 and Col.19 lines 29

and 30 "Normal processing of receiver 148 comprises assembling packets of a message").

Hamilton further discloses *determining whether or not a predetermined flag is contained in the information fragments received* (Col.30 lines 64-66 "decision block 230 and step 232 which detected whether the ACK request flag is set" or Col.12 lines 50-52 "By examining the packet sequence number and, perhaps, the end of the message flag").

Hamilton further discloses *deleting the stored information fragment that corresponds to the information packet, which is prior to another information packet whose corresponding information fragments are determined to contain flags* (Col.24 lines 6-9 "If the entire message has not been received before the timer expires, then message life timer 158 may delete the partially received message" where as disclosed by the applicant in Figure 4, the flag is set when a packet that is to be transmitted, is processed after a reference time. So the "information fragment" deleted is the packet corresponding to a message that was not entirely sent before the reference time. This is the same as deleting a partial message, which is composed of "information fragments", that is not received within the reference time. The information fragments corresponding to another information packet can also contain flags (Table 3)).

Hamilton discloses buffering packets *until* they are all received (Col.19 lines 32 and 33 "messages may have to be buffered until all packets are received"). However, Hamilton does not explicitly disclose *a deletion means*.

Knobel discloses *deleting the information fragment that is stored when the information fragments are assembled to reproduce the information packets* (Col.5 lines 47-51 "When a data frame has been sent to the buffer (i.e. a complete frame)...the other side [of the buffer] removes a complete frame").

Hamilton and Knobel are analogous because they both pertain to data communications.

It would have been obvious to one of ordinary skill in the art at the time of the invention to modify Hamilton as discussed above as taught by Knobel in order to efficiently utilize memory.

Response to Arguments

7.   Applicant's arguments filed 3/29/2007 have been fully considered but they are not persuasive

In the remarks on pgs.11-12, Applicant contends Hamilton sets a flag once every Nth packet and does not set a flag into each second set of information units.

The Examiner respectfully disagrees. Hamilton does not exclude the value of N being 1.   Therefore, in the case where N=1, a flag would be set into each second set of information units.
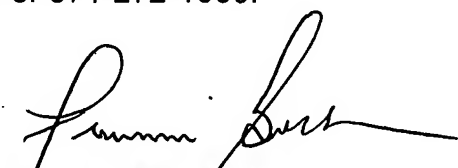
Conclusion

8.   The prior art made of record and not relied upon is considered pertinent to

applicant's disclosure. Ghosh (US 6,678,523) shows setting a bit in a next frame

indicating to delete a previous frame. Anandakumar (US 6,804,244) shows a packet

having information on a previous packet.

Any inquiry concerning this communication or earlier communications from the

examiner should be directed to Mohammad S. Adhami whose telephone number is

(571)272-8615. The examiner can normally be reached on Monday-Friday 8-4:30.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's

supervisor, Firmin Backer can be reached on (571)272-6703. The fax phone number

for the organization where this application or proceeding is assigned is 571-273-8300.

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USPTO Customer Service Representative or access to the automated information

system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

MSA 11/12/2007

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SUPERVISORY PATENT EXAMINER